

02/20/02

j-c966 U.S. PTO

EL 919311211US

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PTO/SB/05 (11-00)

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 02-013
First Inventor Dieter GIRLICH
Title Method and Device for Producing Reticular Structures
Express Mail Label No. EL 919311211 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification (Total Pages 8)
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) (Total Sheets 2)
5. ☒ Oath or Declaration (Total Pages 3)
 - a. ☒ Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
 - b. ☐ (for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney
11. ☒ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Preliminary Amendment
17. ☒ Other: Marked-up Copy of Amended Sp & Claim

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No. _____

Prior application information:

Examiner _____

Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label

24124

or

☐ Correspondence address below

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Patricia M. Mathers

Registration No. (Attorney/Agent)

44,906

Signature

Patricia M. Mathers

Date

Feb. 2, 2002

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LABEL NO.: EL 919311211 US

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 370.00

Complete if Known

Application Number
Filing Date
First Named Inventor Dieter GIRLICH
Examiner Name
Group Art Unit
Attorney Docket No. 02-013

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number 501 517
Deposit Account Name BOHAN, MATHERS & ASSOCIATES
- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
☒ Applicant claims small entity status See 37 CFR 1.27
2. ☒ Payment Enclosed:
☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
		101	710	201	355	Utility filing fee	370.00
		106	320	206	160	Design filing fee	
		107	490	207	245	Plant filing fee	
		108	710	208	355	Reissue filing fee	
		114	150	214	75	Provisional filing fee	

SUBTOTAL (1) (\$ 370.00

2. EXTRA CLAIM FEES

Total Claims 2 -20** = 0 X Fee from below = 0
Independent Claims 12 -3** = 0 X Fee Paid = 0
Multiple Dependent 0 = 0

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
		103	18	203	9	Claims in excess of 20
		102	80	202	40	Independent claims in excess of 3
		104	270	204	135	Multiple dependent claim, if not paid
		109	80	209	40	** Reissue independent claims over original patent
		110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0.00

*or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
		105	130	205	65	Surcharge - late filing fee or oath	
		127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
		139	130	139	130	Non-English specification	
		147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
		112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
		115	110	215	55	Extension for reply within first month	
		116	390	216	195	Extension for reply within second month	
		117	890	217	445	Extension for reply within third month	
		118	1,390	218	695	Extension for reply within fourth month	
		128	1,890	228	945	Extension for reply within fifth month	
		119	310	219	155	Notice of Appeal	
		120	310	220	155	Filing a brief in support of an appeal	
		121	270	221	135	Request for oral hearing	
		138	1,510	138	1,510	Petition to institute a public use proceeding	
		140	110	240	55	Petition to revive - unavoidable	
		141	1,240	241	620	Petition to revive - unintentional	
		142	1,240	242	620	Utility issue fee (or reissue)	
		143	440	243	220	Design issue fee	
		144	600	244	300	Plant issue fee	
		122	130	122	130	Petitions to the Commissioner	
		123	50	123	50	Petitions related to provisional applications	
		126	240	126	240	Submission of Information Disclosure Stmt	
		581	40	581	40	Recording each patent assignment per property (times number of properties)	
		146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
		149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
		179	710	279	355	Request for Continued Examination (RCE)	
		169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) _____

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

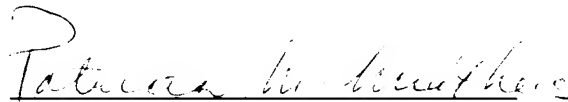
Name (Print/Type)	Registration No. (Attorney/Agent)	Telephone
Patricia M. Mathers	44,906	(207) 773-3132
Signature	Date	FEB 26, 2002

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I, Patricia M. Mathers, hereby state that I am fluent in the English and German languages and that I have reviewed the attached literal translation of the German patent application DE 199 39 155.6 with the German title "Verfahren und Vorrichtung zur Herstellung von Gitternetzstrukturen". I hereby attest that the attached translation is a true and literal translation of the German application.

February 19, 2002

A handwritten signature in cursive script, reading "Patricia M. Mathers", written in dark ink.

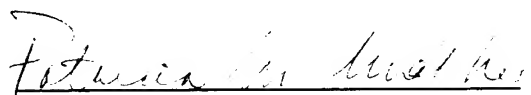
Patricia M. Mathers

Bohan, Mathers & Associates
371 Fore Street, Suite 202
Portland, Maine 04101

J1017 U.S. PTO
10/079331
02/20/02

I, Patricia M. Mathers, hereby state that I am fluent in the English and German languages and that I have reviewed the attached Annex (Beiblatt) to the International Preliminary Examination Report of the International Application PCT/DE00/02597 with the German title "Verfahren und Vorrichtung zur Herstellung von Gitternetzstrukturen". I hereby attest that the translation of the Annex is a true and literal translation of the German Beiblatt.

February 19, 2002



Patricia M. Mathers

Bohan, Mathers & Associates
371 Fore Street, Suite 202
Portland, Maine 04101

1. The closest prior art cited in the application, D1 US-A-3616841, particularly columns 2, 3, comprises, in addition to other steps, the following steps:
 - (1) Placing a polyurethane pre-structure in a casting box with open bottom ("casting flask");
 - (2) Infiltrating the foam pre-structure with a gypsum material;
 - (3) Setting the gypsum material;
 - (5) Removing the foam pre-structure by volatilizing the polyurethane at a temperature between 540 and 820°C, whereby the workpiece remains in the casting box;
 - (7) Infiltrating the still-warm gypsum foam-pre-structure with molten metal;
 - (8) After solidification of the metal, withdrawing the formed gypsum-metal-body from the casting box and removing the gypsum material.

The method according to Claim 1 is distinguishable from D1 in that the workpiece is withdrawn from the casting box, or the "openable container", **before** step (5) and placed in a "second, heat-resistant container" **after** step (5), that is, the method is distinguishable through the presence of the additional steps (4) and (6).

Novelty of the Claims 1 - 6 directed to the method is thus given. The additional steps (4) and (6) enable delay-free heating of the foam pre-structure and its rapid volatilization. Since none of the available documents teach or motivate this task or the means used in resolving the task, that is, do not teach or motivate one to apply steps (4) and (6), an inventive step is present.

Claim 7, directed to a device, claims only a "refractory container with a pour opening". The casting box of D1 can also be considered to be such a container. The dimensions of the inner space being "greater than that of the refractory pre-heated body" cannot distinguish the device from the prior art. Thus, the subject matter of Claim 7 is lacking in novelty as well as an inventive step.

2. The description has not been adapted to the changed claims (lacking support and therefore lack of clarity of the claims, Art. 6 PCT).

This also applies to the objective recited in the application, page 2, middle paragraph, which appears to have already been solved in D1.